Docket No.: 63857.8122.US01 Client Ref No. P99-0052US2

## REMARKS

Independent claims 26 and 49 have been amended. Independent claim 91 has been cancelled and new claim 93 added.

Claim 26 has been amended to describe a processing fluid flow path in the reactor, providing processing fluid into the electrode housing from a position vertically above the at least one electrode, such that processing fluid entering the electrode housing does not directly impinge on the at least one electrode in the electrode housing. Support for this change is found in the specificaion at page 16, second paragraph and in Fig. 1.

Claim 49 has been amended to describe a pressure drop member comprising a generally conically-shaped continuous material having no through openings. Support for this change is found in the specification at page 14, line 5 through page 15, line 11, and in Fig. 3.

New claim 93 describes an electroplating apparatus where substantially all processing fluid movement between the first and second fluid flow regions passes through the pressure drop element. Support for this change is found in the specification at page 16, lines 9-19 and in Fig. 1.

Reconsideration and withdrawal of the rejections is requested in the view of thechanges to the claims and the following remarks.

## **AMENDED CLAIM 26:**

Turning to the prior art, Reid et al., U.S. Patent No. 6,126,798 (Reid) discloses an apparatus where fluid is pumped directly onto the anode material 206. In each design in Reid (including in U.S. Patent No. 6,179,983 B1), the fluid enters through inlets 220, 228 or

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236. In each instance, the fluid from any of these inlets then necessarily impinges directly

on the anode material. Each of these inlets is also vertically below the top level of the

anode material.

In contrast, claim 26 describes a processing fluid flow path in the reactor providing

processing fluid into the electrode housing from a position vertically above the at least one

electrode, such that processing fluid entering the electrode housing does not directly

impinge on the at least one electrode in the electrode housing. Accordingly, Reid does not

suggest these features of amended claim 26. Runston, U.S. Patent No. 4,391,694 also

does not suggest these features. In Runston, the orifice 31 of the inlet pipe 29 is at the

lower end of the anode material. The third reference Okinaka discloses only a test

apparatus having apparently static baths, with no fluid movement. Claim 26 is accordingly

patentable over the prior art.

AMENDED CLAIM 49:

Amended Claim 49 describes a pressure drop member comprising a generally

conically-shaped continuous material having no through openings. As shown in Fig. 1, the

pressure drop member accordingly provides a continuous barrier separating the first and

second flow regions. The outer perimeter (e.g., 140 in Fig. 4) of pressure drop member

attaches to the housing assembly. No other attachments or seals are needed. In contrast,

in Reid, the inlet pipe 200 necessarily passed through the membrane 208. This requires

use of a seal ring 312 and an o-ring 316, in an effort to seal the membrane around the inlet

pipe 200. By avoiding penetrating openings and seals associated with the pressure drop

member, amended claim 49 allows for an improved design. As neither Runston or

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Okinaka disclose a pressure drop member, the combination of Reid with Runston and/or

Okinaka cannot render amended claim 49 obvious.

**NEW CLAIM 93:** 

New claim 93 describes an electroplating apparatus where substantially all

processing fluid movement between the first and second fluid flow regions passes through

the pressure drop element. Reid, on the other hand, does not necessarily even suggest

having the claimed first and second fluid flow regions, because in Reid, the same fluid

provided to the anode material (via inlets 220, 224 and 236), is also provided into the bath

42A above the membrane 208 via the inlet 200. Moreover, regardless of whether Reid

suggests the claimed first and second fluid flow regions, new claim 93 is patentable over

Reid since in Reid, fluid moves upwardly into the bath 42A both through the membrane,

and through the inlet 200 - i.e., without passing through the membrane. As Reid does not

suggest substantially all processing fluid movement between the first and second fluid flow

regions passes through the pressure drop element, and since neither Runston or Okinaka

disclose a pressure drop element at all, the combination of Reid with Runston and/or

Okinaka cannot render new claim 93 obvious.

The claims are accordingly believed to be in condition for allowance.

Although the present communication includes amendments to the claims, and a

discussion of the prior art, the applicant does not concede here that previously pending

claims are not patentable over the prior art. Rather, the claims are changed here to

facilitate expeditious prosecution of this application. Applicant reserves the right to pursue

any previously pending claims or other claims, whether broader or narrower, that are

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supported by the present disclosure under 35 U.S.C. § 112, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, any person reviewing the prosecution history of the present application, or the prosecution history of any parent or other related application, shall not reasonably infer that any subject matter supported by the present application has been disclaimed or disavowed.

A Notice of Allowance is requested.

If the Examiner has any questions or believes a teleconference would expedite prosecution of the present application, please call the undersigned representative at 310-788-3267.

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Respectfully submitted.

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